

ABSTRACT OF THE DISCLOSURE

A compatible optical disk player and data recording and/or reproducing method includes a laser beam source including a first laser diode and a second laser diode, where the first laser diode emits a first laser beam of a first wavelength for recording and/or reproducing the data on/from a first optical disk including a first recording density, and the second laser diode emits a second laser beam of a second wavelength for recording and/or reproducing the data on/from a second optical disk including a second recording density. A diffraction grating selectively splits the first and the second laser beams into a main ray and two sub-rays depending on which optical disk is to be accessed. A photo-detector selectively receives the three rays of the first laser beam and the three rays of the second laser beam at different detecting portions for the data recording and/or reproducing and error detection and compensation.

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